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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

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ENGINEERS' AND MATES' WAGES ADVANCED.

The finance committee of the Lake Carriers' Association met Tuesday afternoon and advanced the wages of engineers and mates, which remained what they had been all summer when the pay of the other members of the crews was advanced on September 3. The changes are as follows:

POSITION.	FORMER WAGES.	NEW WAGES.
First class steamers:		
Chief Engineer	$100	$110
Second Engineer	70	75
Second-class steamers:		
Chief Engineer	$70 to $90	$85 to $100
Second Engineer	60	65
Third-class steamers:		
Chief Engineer	$60 to $75	$70 to $ 85
Second Engineer	50	55
First Mates	$50 to $70	$60 to $ 80
Second Mates	35 to 50	40 to 50

The committee also decided to advance the rate for trimming at all ore shipping ports to 3 cents.

THE MARINE RECORD is the headquarters for marine publications of every description. No. 144 Superior St.

THE DEEP WATERWAYS CONVENTION.

The convention of the International Deep Waterways Association may be considered a success to an extent which surprised many of the moving spirits of the association. The greatest interest was shown, and all phases of the subject most thoroughly discussed. The feeling of the convention is best shown by the following resolutions, adopted as supplementary to the original Toronto platform:

Recognizing the supreme utility of deep waterways through the Great Lakes and thence to the sea, and reaffirming in full the platform adopted at the organizing convention held at Toronto in 1894, the International Deep Waterways Association, in first convention assembled, declares as follows:

1. That the public welfare demands the deepest practicable channels between the several lakes and to the seaboard to enable vessels of the most economical type to pass between lake ports, or between the lakes and the seaboard, or to foreign waters, without the necessity of transshipment.

2. That the said requirements call for a least depth of twenty-one feet in all channels and the building of all permanent structures for a navagable depth of twenty-six feet or more in order that the water courses may be progressively and economically deepened to the ultimate necessities of traffic.

3. That the prompt action of the Congress of the United States and the government of the Dominion of Canada providing for a joint commission to investigate and report upon the establishment and maintenance of deep water between the Great Lakes and the sea, conformably to the resolution adopted at Toronto in 1894, is a matter for congratulation and that in view of the extended scope and great importance of the subjects to be examined by the said commission, this convention urges that the most liberal provision be made for the necessary expenses.

4. That the broadening of the channel through the connecting shallows between Lakes Erie and Huron and Lakes Huron and Superior, as recommended by lake carriers, is urgently demanded by the interests of commerce and is in line with the progressive development of a great trunk water route.

5. That the international interest in the great fresh water seas of the American continent and in the ship routes joining them to the ocean is recognized and that the use of their waters and the control of their levels are proper subjects for international regulations.

6. That pending the development of the best deep channel or channels to the ocean, the promised early completion by the Canadian government of the St. Lawrence canals, if possible with lengthened locks, will result in marked benefit to international commerce and the producers of the interior; likewise, that the movement in the State of New York toward lessening the cost of transportation to tide water by improving the Erie canal, which must have a permanent value, is noted with satisfaction by this convention.

7. That with respect to the several resolutions offered concerning local canal projects all enterprises designed to extend marine commerce through lateral routes tributary to the Great Lakes system are to be encouraged.

8. That this convention calls special and renewed attention to the desirability of establishing a permanent international court as set forth in the organizing convention in Toronto in 1894.

Mr. William Livingstone, as president of the Lake Carriers' Association, offered the following resolution. which was adopted:

Whereas, All the cuts and improvements in the St. Mary's River are of the width of 300 feet, and,

Whereas, There is at the St. Clair Flats a single canal or channel of 300 feet width for accommodation of all through traffic to and from Lake Superior and Lake Michigan and the lower lakes; and

Whereas, At the dangerous and difficult passage known as the Limekiln Crossing, which has to accommodate almost the entire commerce of the Great Lakes, there is a channel through rock with a width of 440 feet, with sharp turns at either entrance and a strong current; and

Whereas, The phenomenal increase, size and capacity of lake vessels and the growing custom of towing enormous consorts with long tow lines already overtax the capacity of those channels and render their navigation extremely hazardous, which hazard increases yearly; and,

Whereas, Serious accidents occur, which block these passages and are liable at any time to suspend the entire navigation through them,

Resolved, That the present proportion of the traffic and its rapid increase render it imperative for reasonably safe navigation that these channels be enlarged; those of the St. Mary's River to at least 500 feet; the Limekiln crossing to at least 600 feet, and that of the St. Clair Flats canal to 600 feet by the addition of a 300-foot passage alongside its present westerly pier. It is the unanimous voice of this convention that the government be urged to take up these works and carry them to completion at the earliest possible moment.

Mr. Luther Allen, of Cleveland, offered the following resolution, which was adopted:

Whereas, The Hydrographic Service of the United States Navy Department has since its extension to the inland lakes resulted in great benefit to navigators and the merchant marine,

Resolved, That we heartily approve and indorse the United States hydrographic service as an invaluable source of information tending to promote the safe navigation of the Great Lakes, and

Resolved, That the association respectfully urges upon the Navy Department and Congress of the United States the further extension of the service and the establishment of branch offices at all important ports.

The matter of choosing the next place of meeting was left to the executive board, some controversy having arisen in the question. A favorite idea with the board at present is to hold the next convention in June, 1896, and to meet again the following December in Washington, about the time Congress convenes.

A NASTY OFFENSE.

Engineer, of New York, usually hits the nail on the head, and the following comment is no exception to the rule:

"THE MARINE RECORD says, very truly: It seldom pays to attempt to gain patronage by 'running down' a competitor. Our virtues are rarely seen by others with as vividly appreciative an eye as we ourselves see them, and when they are forced with undue persistence, and with 'odious' comparisons, upon the attention of the conservative business man, his suspicions are apt to be aroused, and the effect is the opposite from that desired.

"This is possibly prompted by some experiences in its own city, and it is a curious thing that persons who use slander as an adjunct to business, do not reflect that their remarks are repeated to those they have slandered without loss of time. In this State it is a penal offence to disparage competitors and should be made so in every state."

Capt. Abraham Howe died September 6, aged seventy-three years at the home of his daughter, Mrs. Charles H. Winchester, Grand Rapids.

NEWS AROUND THE LAKES.

CHICAGO.

Special Correspondence to The Marine Record.

Much regret was expressed in marine circles at this port on receipt of the news of the death of Captain John Shaw, at Bay City on Tuesday.

The steamer Westover arrived here Monday night with her consort the barge A. T. Bliss, which was dismasted recently in a heavy gale.

The steamer Uganda arrived here Sunday with wheat from Duluth.

Captain Edward Mullen, of the schooner Commerce, of this port, which dragged her anchors and went ashore at Scott's Point in a heavy gale, at 2:30 a. m. Monday, September 23, was in Chicago Saturday. He reports the schooner in good condition and he was going to Manitowoc, where he had arranged to have a tug with wrecking pump sent to Scott's Point to release her.

Captain John Freer, of the schooner Skylark, which was driven ashore in the heavy gale of September 23 at Naubinway, arrived here Tuesday morning. He cut away the masts and stripped the schooner all her sails and gear before leaving here, and put them on board the schooner Ida Olsen, for shipment to Chicago.

The schooner Julia B. Merrill, Captain V. Harms, with lumber from Escanaba arrived here Tuesday morning in tow of the steamer George Burnham which towed her from Sturgeon Bay. The schooner was leaking badly, having encountered very bad weather before going into Sturgeon Bay for shelter. She left Escauaba nearly two weeks ago.

The Goodrich Transit Co's. steamer Atlanta, Captain Wm. Nicholson, was disabled by the breaking of her shaft in the heavy seas, last Thursday night when about eight miles off the shore between Holland and Grand Haven. The steamer Soo City of the Holland & Chicago Line went to her assistance and towed her into Grand Haven. The Atlanta arrived in Manitowoc Sunday in tow of the tug Arctic.

The excursion steamer Macatawa, Captain Edward Napeer, was burned nearly to the water's edge last Thursday morning at 2:30 o'clock, she was insured for $3000.

The schooner Thos. H. Howland, which arrived here late Thursday night with salt from Manistee, had her fore and main mastsheads carried away in a squall about twenty miles north of Chicago.

The Vessel Owners' Towing Company have started a tug line at South Chicago, and have sent their tugs Calumet, Van Schaick and A. A. Carpenter there to do towing and the tug Earnshaw to work as a despatch boat. The company will have an office at 234 Ninety-Second street which will be open at all hours. Noble K. Higgie will superintend the business, and he will be glad to have his many friends patronize him.

The old schooner John Raber, which narrowly escaped becoming a total loss off Dune Park, was brought into South Chicago at midnight Sunday by the tug Elphicke and the South Chicago life-saving crew. She had all her sails blown away and was leaking very badly. Andrew Johnson, her owner, was drowned by the upsetting of the yawl boat when attempting to reach the shore. Three of the crew who were with him clung to the upturned boat until they drifted ashore. The captain and two more of the crew, who remained on board the schooner were rescued by the life-saving crew.

Carr & Blair chartered the steamers C. A. Eddy and John F. Eddy for corn to Buffalo at 2¼c., the steamer A. G. Lindsay for oats to Buffalo at 1⅞c., the steamer Progress for corn to Midland at 2c. free of elevator fees, the steamer Uganda for wheat at 2½c., barley at 2⅛c., and oats at 1⅞c. to Buffalo. Palmer, Cook & Calbick chartered the steamers Fred Pabst for oats to Buffalo at 1⅜c. J. G. Kieth & Co. chartered the steamers Majestic, Kittie M. Forbes, C. S. Parnell and Viking for corn to Buffalo at 2¼c., the schooner Mary McLachlan for barley to Buffalo at 2⅛c., the barge M. K. Moore for oats to Buffalo at 2c. W. M. Egan chartered the new steamer Yale for 118,000 bushels corn at 2¾c. and 70,000 bushels oats at 1¾c. to Buffalo, the steamer Omaha for 65,000 bushels corn, to Ogdensburg at 4¾c., the steamer City of Rome for 88,000 bushels of corn, and Denver 64,000 bushels of corn, Lewiston 75,000 bushels corn, and W. M. Egan 80,000 bushels corn to Buffalo at 2¼c., the steamer Robert Mills 95,000 bushels barley at 2⅛c. to Buffalo. Capt. John Prindiville chartered the steamer O T. Flint for wheat to Toledo at 2½c., the steamer A. Weston and schooner Jennette for clipped oats at 1¾c. and the schooner Eleanor for corn at 1⅞c. to Port Huron. P. H. Fleming & Co. chartered the steamer Ionia for 65,000 bushels corn to Buffalo at 2¼c. C. W. Elphicke & Co. chartered the schooner F. W. Gifford for 40,000 bushels oats to Port Huron at 1¾c

COLLINGWOOD.

Special Correspondence to The Marine Record.

The North Shore Navigation Co.'s steamer City of Midland, was on the Collingwood Dry-Dock & Ship Building Co 's dry-dock last week. She received two flanges on her wheel.

Capt. John Smith, of the steam-barge E. C. Pope, who picked up the crew of the sinking steamer C. A. King, is well known in Collingwood, this being his birthplace.

It is reported that Messrs. J. & C. Noble are considering the advisability of building a new wooden steamer during the next winter. If built, the steamer will be put on the route between Killarney and Detroit, in the place of the steamer John J. Long. The Long was on this route this summer, but proved to be inadequate, the trade being much heavier than was anticipated.

The Great Northern Transit Co., will probably rebuild one of their steamers during the ensuing winter. Should they not rebuild it is probable that a contract will be given for a new steamer. Manager Andrews, of the Collingwood Dry-Dock and Ship Building Co is preparing a model and plans.

It is reported that the Great Northern Transit Co. have decided to withdraw their new steamer Majestic from the Sault route for the balance of the season Low water in the up-lake ports and channels is the principal reason given out.

The Dominion government are taking unusual interest in the Collingwood harbor this year. On Wednesday last, Hon. J. A. Ouinnet, Minister of Public Works, accompanied by Mr. Costo, chief engineer of that department, visited here and inspected the harbor. Manager Cameron, of the Great Northern Transit Co., placed his steamer Majestic at the disposal of the reception committee, on which the distinguished visitors, accompanied by some of the prominent men of Collingwood, made a trip around the harbor. They expressed themselves as greatly surprised at the importance of the shipping of this port, and the large steamers which make their headquarters here. In the evening the visitors were banqueted by the citizens.

Capt. F. X. Lafrance, of the North Shore Navigation Co.'s steamer City of Midland, was presented with a certificate of bravery for rescuing a man from drowning near Spanish River. The presentation was made by Mayor Callany, in the Grand Opera House, on behalf of the Royal Humane Society. A large number of the citizens were present.

The dredge Challenge and tug Trudeau have returned to this port to winter. They spent the greater portion of the season in Thornbury harbor.

The number of passengers carried by the local lines of steamers during this season exceeds that of any former year.

CLEVELAND.

Mr. E. R. Edsou, the well-known fish dealer, is trying a new experiment, which promises to be very successful. He bought the barge Wyandotte at a very low figure, and is having her put in good shape at the Cleveland dry-dock. It is his intention to use her as a floating packing house, putting fish in her at Vermillion, and bringing them to Cleveland for shipment later when desired. The process of packing will begin very soon.

The government dredges have been working in the Cuyahoga river up to the Lake Shore bridge, and there is now 18 to 19 feet of water in the channel. It is considered imprudent to dredge closer to the piers and docks, however, and the depth there is much less.

Philip J. Minch, Fred Palmer, and others have bought the steamer City of Glasgow from Capt. James Davidson, of Bay City, for $110,000. She is already in the service of her new owners.

The fleet of the Cleveland Steel Canal-boat Co. reached Cleveland Wednesday, and are now unloading 7,000 barrels of sugar at the Big Four dock. The fleet experienced some very rough weather on the way up from Buffalo, and behaved themselves admirably.

ASHTABULA HARBOR.

Special Correspondence to The Marine Record.

The late storm has cost Ashtabula some hundreds of dollars by reason of not having a breakwater, and the consequent necessity of vessels seeking other ports.

The P. Y. & A. people are taking down the old ore cranes which were supplanted by the King portable hoists.

The Canadian steamer Lake Michigan had a gangway knocked out by a hogshead of high wine Sunday, and was obliged to come in and repair at Devney's yard.

The steamer Benton which loaded coal here has also on her deck one of the old McMyler whirligigs formerly used on the Minnesota coal docks and which she will take to the Soo where it is again to be put into service.

DETROIT.

Special Correspondence to The Marine Record.

Dock No. 2, of the Grand Trunk Railroad, is being rebuilt, with steel and iron as materials.

The owners of the steamer Samuel Hodge have libeled the schooner W. H. Rounds and her cargo for $2,000, on a salvage claim, stating that on Monday, September 23, the Hodge responded on Lake Huron to the signal of distress made by the Rounds, picked her up when the schooner was at the mercy of the elements, and brought her safely to port. The libel values the schooner at $7,000 and the cargo at $14,000.

United States Marshal Winney has a warrant out for Herbert Lovering, deck hand, aged 26 years, for assault with intent to kill on the high seas. Lovering, it is alleged, mutinied on the J. R. Langdon, and refused to work, and when remonstrated with by Capt. Harvey Brown, struck the captain in the face, and then seized a capstan bar and defying everybody took the run of the ship. He could not be found when the boat stopped at Detroit.

RAISING THE CAYUGA.

Capt. James Reid is not losing any time in his preparations for his big wrecking job on the steamer Cayuga, which lies in 101 feet of water just above the Straits, in Lake Michigan. His contract with the MacKinnon Manufacturing Co., of Bay City, Mich., called for the delivery of the four pontoons which they are to build for him within thirty days from the time of closing the contract, and he is negotiating for the purchase or rental of additional pontoons. Those four which the MacKinnon Manufacturing Co., will construct will be ready in a little more than two weeks. The material was shipped from Pittsburg a week ago, and is already in the company's yard. While the shells will contain considerable bracing in the form of angles, etc., in the interior the job is, in the main, a plain one, and with sufficient workmen, can be finished rapidly. The cylindrical portions of these pontoons are 12 feet in diameter by 30 feet in length, with cone-shaped projections of three feet on each end, making them 36 feet long over all.

It is Capt. Reed's intention to get to work as soon as possible. It will be rough and not cold weather, however, which will detain him. He says divers can work better in colder water, and at that depth the variations in temperature will not be serious at any rate.

In the Cayuga's upper hold are 18,000 barrels of flour, which will be taken out by divers, and will then float to the surface and be easily picked up. In the lower hold is some 15,000 bushels of oats, which will be poured out into the lake. The hole in the Cayuga is on the starboard side. It is only about four feet square and easily patched. Then, with 18 pontoons secured to the wreck and filled with air, it is expected that the wreck can be brought to the surface without trouble. She will then be taken into Harbor Springs, where the wrecking contract calls for her delivery.

Capt. Reid's price for the wrecking job is said to be $100,000, if he is successful, if not he will get nothing but salvage upon such cargoes as he may bring up. He is going about his work in a manner which insures a thorough job. He will be assisted by W. H. Manlon and George Reynolds, experienced divers, and is having an engine made at West Bay City to work the air pump. Six handpumps, will, however, be in readiness, should the machinery break down.

FIFTY YEARS OF WEDDED LIFE.

Capt. and Mrs. E. M. Peck, of Detroit celebrated their fiftieth wedding anniversary quietly in Cleveland, Sunday, at the residence of Mrs. George E. Hartwell, a niece living on Franklin avenue. Capt. Peck formerly resided in Cleveland for a number of years, and many old friends called during the day to tender congratulations.

Capt Peck was born in 1822, in Otsego County, N. Y., and removed to Cleveland at the age of sixteen years, where he made a study of shipbuilding, serving a regular apprenticeship, and learning the trade thoroughly. Later on he formed a partnership with I. U. Masters, the firm building over 100 steam and sailing vessels, one of the oldest of which, the Fountain City, now thirty-eight years old, was only two years ago cut down from a passenger into a lumber steamer.

Capt. Peck abandoned the ship building business in the early 70's, finding that at the rates of freight then prevailing, the business of operating ships was much more profitable even than that of building them. He organized the Northwestern Transportation Co. which is still in existence, and for which a large steel tow barge is now building at the Chicago Ship Building Co.'s yard. Capt. Peck introduced the practice of towing on the lakes, the R. J. Hackett towing the schooner Forest City—since turned into a steamer—up and down the lakes in 1870.

Capt. Peck, although in his seventy-third year, is still an active business man, and while rather gray, looks fully ten years younger than he is He is much interested in all questions affecting the commerce of the lakes, and keeping his eye open for improved methods, and promptly adopting them when they meet with his approval. His friends all hope that he and Mrs. Peck will celebrate many more anniversaries of their quiet marriage in Bedford, in 1845.

The tug Cheney was seized last Friday by Canadian authorities at the Sault for alleged violation of the customs laws. The affair was found to be a misunderstanding, however, and the tug was released without cost.

GENERAL ORLANDO M. POE DEAD.

General Orlando M. Poe, corps of engineers, U. S. A., died at 8 o'clock Wednesday morning at his home, 131 West Congress street, Detroit, Mich., from an attack of erysipelas brought on by a fall at the Sault. On September 18, he was making an examination of the locks, when he slipped as he stepped from the lock wall to the deck of a boat, and injured his left leg. Erysipelas developed in the wound on his return to Detroit, which was combatted by physicians with such apparent success that it was supposed he was out of danger. Later, however, there was a reinfection, the disease appearing in the face.

Gen. Poe was born in Stark county, O., March 7, 1832. Twenty years later he received an appointment as a cadet at West Point, his class standing entitling him, on graduation, to a commission in the engineer corps of the regular army. At the outbreak of the war of the rebellion, he had been advanced to the first lieutenant's rank. In the war he was Gen. Sherman's chief of engineers during the whole of the former's march to the sea. When Col. Richardson, of the Second Michigan infantry, was promoted after the first Bull Run to be a brigadier-general, the command of the regiment was given to Gen. Poe, with the rank of a colonel of volunteers, his commission dating from Sept. 16, 1861. The official record of his subsequent military service is as follows:

Brigadier-general of United States volunteers, Nov. 29, 1862; resigned as colonel of Second Michigan infantry, Feb. 16, 1863; captain, engineer corps in the regular army, March 3, 1863; brevet major U. S. A., July 6, 1864, "for gallant services at the siege of Knoxville, Tenn.;" brevet lieutenant-colonel U. S. A., Sept. 1, 1864, "for gallant services at the capture of Atlanta, Ga;" brevet colonel U. S. A., Dec. 21, 1864, "for gallant services at the capture of Savannah, Ga.;" brevet brigadier-general U. S. A., March 13, 1865, "for meritorious services during the campaign against Atlanta, Savannah and in the Carolinas;" chief engineer Gen. Sherman's army; major of engineers, U. S. A., March 7, 1867; colonel and aide de camp at army headquarters, Jan. 1, 1873; detailed for service under lighthouse board; detailed for service on waterway improvements on the great lakes; placed in charge of improvements from Lake Superior to Lake Erie in 1883.

In even this formal, concise record, taken from war department documents, there is revealed that which a more detailed history would show in a glorious light. After rising to the position of brigadier-general in the volunteer forces, his services to the republic won him the distinction of being thrice brevetted in the regular forces within less than a year. While he had a brilliant record in the eastern armies, he having been a participant in skirmishes and pitched battles to the number of three or four score, it was in the west in which the scene of the most conspicuous achievements was laid.

Among the notabe official matters with which Gen. Poe had a connection after the close of the war were the courts of inquiry on the Proteus and the Greely relief expeditions. One of his papers on transcontinental railroads became a famous engineering document, being quoted in full by Gen. Sherman in one of the latter's annual report.

Although Gen. Poe did not become supervising engineer of the northwest division until 1883, succeeding the late Col. Farquhar, he had for a long time prior to that year devoted his great ability to the improvement of navigation conditions. From 1874 to 1884, he was a member of the lighthouse board and among other things which will for years to come keep the memory fresh in marine circles was the designing and constructing of the Stannard Rock light.

The general had but one surviving child, Miss Elizabeth. Within the past four years he had lost by death a married daughter, Mrs. Harry Fitzhugh, residing in Pittsburgh; his son Charles, the date of whose death was May 18 last, and a brother, William Poe, of Massillon, O.

Next March Gen. Poe would have been placed on the retired list of the regular army had he survived. But so thoroughly were his service in constructing the Sault canal lock appreciated that the Lake Carriers' Association had arranged to ask the government to retain his services as private engineer untilt the new lock should be completed.

The sad news was received at the War Department with expressions of the most profound regret. Gen. Poe has been one of the most prominent engineers in the service for many years past, and as an army officer well expressed it, in no other country could he perform such services and have died a colonel. For his regular army title was merely that of colonel, his brevet having been received during the war. It is thought that a military funeral will be ordered by the Secretary of War, the troops at Fort Wayne participating.

A meeting of the executive committee of the Lake Carriers' Association, was held in Capt. John Corrigan's office, Cleveland, at noon Thursday, and was generally attended by vessel owners of the city. Capt. Corrigan occupied the chair, and on motion Messrs. B. L. Pennington, M. A. Bradley, H. D. Goulder, Capt. Thomas Wilson, and Capt. George P. McKay were appointed a committee to draft suitable resolutions expressive of the sorrow and sense of loss of the lake men at the death of General Poe. It was also decided to suggest by telegraph to President Livingston that he ask the Secretary of War, on behalf of the Lake Carriers' Association, to suspend lockages at the Sault canal for two hours during the funeral of General Poe, as a mark of respect to his memory.

A meeting of Detroit vessel owners was held in the office of Capt. E. M. Peck, Thursday morning, to take formal action on the death of Gen. Poe.

FLOTSAM AND JETSAM.

Milwaukee received 37,547 tons of coal last week.

Hon. F. W. Wheeler has sold the steamer Ossifrage to George T. Arnold of Mackinaw. The Ossifrage will run between the Straits and the Sault, and the Faxton will go on the Saginaw Bay route.

THE LATE GENERAL O. M. POE.

It is stated that the government contemplates discontinuing the army post at Sackett's Harbor.

The wrecking tug Favorite will make her headquarters at Escanaba, aud will not go to the Sault.

Contractor Olsen says the life-saving stations at Plum Island and Bailey's Harbor will be ready for occupancy November 1st.

All the lightships at the dike, Hay Lake Channel, were capsized last week. The current there is too strong for them to float, right side up.

Marquette Chips, in its issue of Saturday, September 21st, gives a brightly illustrated account of the recent visit to that port of the steamship North West.

The Commonwealth mine on the Menominee range will not shut down next winter, as has been reported. This mine has shipped about 150,000 tons of ore so far this season.

There will be very much less ore on the stock docks of the ore mines, as a rule, than could have been found last year, and the prospects for a vigorous winter's work are very bright.

The Marine Insurance Co., of Chicago, libeled the Canadian steamer Arabian at Duluth for $8,000. This is the proportion of damages, amounting to $15,000, done to the schooner Minnedosa in collision with the Arabian in 1892, assessable against the latter boat.

A SERIES OF WRECKS.

The continuation of the severe gales was marked by the loss of more craft of the older wooden class, and these casualties were varied by more serious collisions in the Sault.

The steamers Mark Hopkins bound down with ore, and Vanderbilt bound up, collided near Nine-Mile Point, Hay Lake, on the morning of September 27th. The Vanderbilt struck the Hopkins on the buff of the port bow, and the latter sank in 30 feet of water. The Vanderbilt is uninjured, except for the pine work on her bows, which was stove in. The Hopkins and cargo are insured, and underwriters have asked for bids, to be opened at C. A Macdonald & Co.'s office, Chicago, October 7, on raising the Hopkins and delivering her at dry-dock, the underwriters having the option for ten days after delivery of giving the wreckers the boat or the contract price.

On the morning of September 28, the steamer Robert L. Fryer with coal for Duluth, was sunk two miles below the dike in Hay Lake Channel by collision with the ore-laden steamer Corsica. The Fryer was cut in to the foremast and her bow is nearly all gone. She lies with her decks below water. She is insured for $90,000, and the tug Favorite is looking after her. The Corsica's port bow was stove in, and her fore peak is full of water and open'd up two feet below the water line. She will repair at once at the Cleveland dry-dock.

At four o'clock Sunday morning, the 29 h the steamer C. J. Kershaw, and schooners Moonlight and H. A. Kent went ashore four miles east of Marquette, while trying to make that harbor. The Kershaw was driven on a reef nearly a mile from shore, where she broke in two and is a total loss. Her crew were saved with difficulty. The Kershaw was built in 1874 at Bangor, Me. She was owned by Capt. W. S. Mack, and was insured for $35,400. The Moonlight and Kent are ashore on the main land, and have been abandoned to the underwriters. The Moonlight is insured for $17,200, and the Kent at $11,000.

The little schooner Elma, built at Marine City in 1873, and rated B1 for coarse freight only, was lost last Sunday, off Pictured Rocks, Lake Superior. She was towing with the schooner Jones behind the steambarge Birckhead and the tow. The line parted and she drifted about, throwing her masts out, and then becoming water-logged. She finally struck a rock. One sailor was killed while trying to get ashore after another, George M. Johnson, had succeeded in getting ashore. After a time a line was thrown to Johnson on the rocks.

The Jones had a pretty serious time. She dropped anchor near White Fish Point, and lay until Monday evening with the seas sweeping over her, when Capt. Bernier and Capt. Small, of the life-saving stations near by, were in readiness to take them off, and both crews worked heroically, the life boats being capsized several times in the surf. The Jones' crew were rescued, and later the schooner was taken to Marquette in tow of the tug Boynton, having preserved her cargo intact.

The schooner Lady Franklin went ashore at Hammond's Bay Sunday, and will undoubtedly be a total loss. She was built at Algonac in 1861.

The schooner R. J. Carney drifted ashore and went to pieces while loading lumber at Shelldrake, above the Sault, Sunday.

The steamer Montana went into Houghton last Thursday after passing through some pretty rough weather outside, which opened her up so she filled and sank, helping to block the channel. The Inman Towing Co., of Duluth, sent an expedition and have raised her. She will have to be dry-docked.

The schooners Sam Flint and A. C. Maxwell are ashore near Death's Door Passage to Green Bay, and a number of minor casualities are reported. Only two lives have been reported lost, so far, however, very good showing, as life-saving crews did some very arduous work.

The little steamer Macatawa had her upper works burned at Chicago, Thursday last. The loss is estimated at $3,000. Two members of the crew are thought to have perished in the flames.

The little ferry steamer Gracie Barker, at Harbor Springs, also burned last Thursday evening. The loss was $8,000, with no insurance.

MARINE LITIGATION.

WHAT IS A MARITIME CONTRACT?

The decision in full of Judge Seaman, U. S. Judge for the East District of Wisconsin, handed down April 17, 1895, will be of interest, as winter is coming on, and contracts for winter storage will be made in a few months. The summary follows:

1. CARRIERS—TERMINATION OF CARRIAGE—CHARACTER OF LIABILITY.—In November, 1893, a cargo of corn was shipped on a schooner at Chicago, to be carried to Buffalo, the bill of lading providing that the charge for freight should include free storage in the vessel at Buffalo until April 1, 1894. On arrival at Buffalo, the cargo was inspected and found in good order. Thereafter the vessel remained moored at a wharf, in charge of the captain. During the winter, in consequence of an unusually low tide, the vessel grounded, and was thereby strained and caused to leak, whereby the cargo was damaged. *Held*, that the liability of the owner of the vessel as carrier, ceased on her arrival at Buffalo, and thereafter his liability was that of a warehouse man only.

2 ADMIRALTY—JURISDICTION—CONTRACT FOR STORAGE ON VESSEL—*Held*, further, that the water-borne character of the contract ceased on the arrival of the vessel at Buffalo, and that the admiralty had no jurisdiction of the claim for damages to the cargo while lying in the vessel as a mere storehouse.

3. SHIPPING—HARTER ACT.—It seems that even if the contract were maritime, the vessel would be relieved of liability under the Harter act, (Laws 1893 *c.* 105.) the vessel having been properly manned and equipped, and the fault, if any, having been the management of the vessel during the winter.

This was a libel by J. Henry Norton et al vs. the chooner Richard Winslow for damages to a cargo of corn.

The schooner Richard Winslow received at Chicago, November 16, 1893, a cargo of corn to be carried to Buffalo. The bill of lading states that the lake freight is 3c per bushel "including free storage in vessel in Buffalo harbor until April 1, 1894, to be unloaded at shippers' option on or before April 1, 1894. The vessel arrived at Buffalo November 22, 1893. The cargo was then examined by the "surveyors," one selected by the consignee and the other by the carrier, and they certified that it was in good condition and uninjured. The vessel was thereupon moored at a wharf pursuant to direction by the shippers, and remained during the winter in charge of the master as shipkeeper. In February there occurred heavy northeast gales, which lowered the water in the harbor to an extraordinary degree, and the answer states that it caused said schooner to take the bottom, and strained the butts of her deck, hatch coamings, and mast apartment, without any fault or neglect on the part of the respondent; that, in consequence thereof, "a portion of the cargo was found to be wet during the winter, and was taken out, and when the schooner was discharged in the spring "820 bushels of corn was in bad condition, and the remainder somewhat damaged." The cargo was delivered April 7, 1894, and the consignee then paid the freight, but claims $2,202.64 for damages to the corn under the circumstances shown. After the inspection by the "surveyors" on arrival and in accordance with their suggestion, "that hatches were put on and covered with storm paper and canvas covers." "The surveyors made another examination after the February storm, and removed some wet corn, and pronounced the remainder safe, and closed the hatches. The testimony is undisputed that they looked over the deck and hatches, and found no signs of openings from the strain, and that the decks were kept clear of snow throughout the winter. The libelants claim, and their testimony shows, that the grounding and listing of the vessel would tend "to strain the deck and open the butts on deck and hatches," and cause leakage; that the safest precaution was to try the seams with a knife, and go over them with a calking iron, immediately the vessel was restored to position. The testimony does not show that such measures were either suggested or adopted. The libelants further show that the vessel owner was living in Buffalo, was frequently about the vessel during the winter, was an experienced mariner, and they therefore claim that he should have known of and adopted these requirements for the protection of the cargo.

Judge Seaman, after reciting the facts as above, said: "The practice of utilizing vessels, when laid up for the winter, as storehouses for grain, has become frequent in the ports of the Great Lakes. The shipper thereby saves elevator charges, and the vessel owner secures a cargo. The transportation may precede the storage, oe may close it; in either scheme the storage extends to the opening of navigation in the spring. In view of this practice, the questions involved in this case have special importance, and I have given them careful consideration. In the hope and expectation that they will br taken up by appeal, and thus become settled for this circuit a brief statement of my conclusions will suffice for the purpose of a decree here.

"1. Upon the facts it is clear and undisputed that the damages originated after the vessel had completed the transportation—after arrival in Buffalo, inspection of the cargo, mooring and dismantling the vessel for the winter and covering the hatches to protect the corn. It is the general rule of law respecting carriers of goods that their liability as carriers terminates with the service of transportation, after a reasonable time and opportunity for the consignee to accept and remove them, and that for any storage thereafter, or any storage previous to and while awaiting orders of the shipper for forwarding, the liability is that of a warehouseman only. As defined in Kohn vs. Backard, 3 La. 224, the contract of affreightment by water is one to carry from port to port, and the owners of a vessel fulfill the duties imposed upon them by delivering the merchandise at the usual places of discharge. I can find no ground for excepting the contract in this case from that rule, and the conclusion follows that the respondent can only be charged with the liability which attaches to the contract of storage—that of warehouseman. The measure of that duty is the exercise of ordinary care, or the care which a reasonably prudent man takes of his own property similarly situated. If it be assumed that the storage is so connected with the transportation that the admiralty may take jurisdiction and consider that liability, and if it be further assumed that the vessel owner owed a duty of personal attention and care, aside from furnishing a competent shipkeeper, the testimony does not satisfy me that there was want of ordinary care upon his part. Arguing from the result, it is easy to suggest what precautions might-have saved the injury; but he was not an insurer, nor is he held to the exercise of all possible care.

2. If any cause of action is shown, I think it is not within the cognizance of admiralty. With the termination of the carriage, tne water-borne character of the contract ceased, and the vessel was converted into a mere winter storehouse for the corn. It is true that the ordinary contract of affreightment includes, and is only discharged by delivery to the consignee, but here there was a constructive delivery, so far as concerned that contract, and thence forward the corn was taken and held under the new bailment, that of warehouseman. In the Pulaski, 33 Fed. 383, Mr. Justice Brown, then district judge, so held in respect to a similar contract, wherein the winter storage was at the point of shipment, intending transportation on the opening of navigation, and the libel was filed for injury suffered by the grain during the term of storage. The storage here in question was no more an incident of the transportation than it was there. The division of the contract into its separate characters is here marked by constructive delivery at Buffalo. The storage side of the contract was not maritime.

"3. If the contract be regarded as maritime—as that of a carrier throughout the storage it is doubtful whether the vessel and the owner would not be relieved of liability by the provisions of Sec. 3 of chapter 105, laws of 1893, known as the Harter act. It is alleged and shown that the vessel was in all respects seaworthy and properly manned, equipped, and supplied when the cargo was received, and if there was any fault during the winter it was in the management of said vessels. That act expressly saves the vessel and owner from liability in such cases.

"The libel must be dismissed with costs, and decree will be entered accordingly."

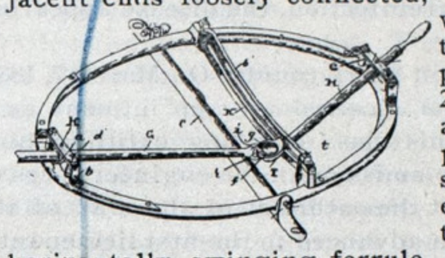
JUST PUBLISHED.

The new Hydrographic Office Chart of Lakes Erie and Ontario, is something no master sailing the lower lakes can afford to be without. It contains the latest information regarding depths of water, compass variation, lights and fog signals, and includes Lake St. Clair and St. Clair and Detroit Rivers, besides the lower end of Lake Huron, the southern part of Georgian Bay and all of Saginaw Bay. These charts can be obtained at the office of THE MARINE RECORD, No. 144 Superior street, Cleveland, at 75 cents each.

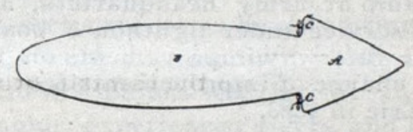
NEW INVENTIONS.

The efforts of inventive geniuses on the lakes seem of late to have been concentrated upon evolving a solution of the rowing problem, whereby the oarsman mav face the bow of the boat, and thus direct his course with more accuracy. Patent No. 546,942 is for a "Bow-Rowing Device," granted to Andrew Smith, of Traverse City, Mich. The application was filed February 12, 1895. The claims are as follows:

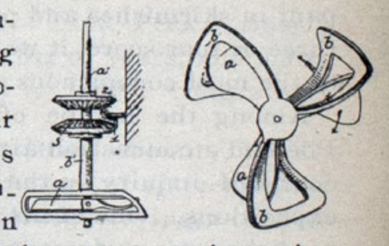
1. A device comprising a frame intermediately pivoted to have a vertical swing, a two-part oar having its adjacent ends loosely connected, and a transverse slide-way extending across the frame, in which one part of the oar is held. 2. A device comprising a frame, intermediately pivoted, a horizontally swinging ferrule at each end, a two-part oar extending through the said horizontally swinging ferrule, the inner ends of the said two-part oar being jointed to permit a free relative horizontal movement, a transverse slide-way across said frame, one part of the oar having grooves to receive the said slide-way. 3. A device comprising an intermediately pivoted frame, a two-part oar, one part of the oar having a yoke, the other part of the oar a circular portion within the said yoke, one being provided with a groove and the other with a projection entering the said groove, whereby they are loosely held together. 4. A device comprising an intermediately pivoted frame, a guide in each end of the frame, for receiving the said two parts of the oar, a transverse bar extending across the frame, and a frame *b* extending up over the guide at each end of the frame, and back and across the said transverse bar or plate. 5. A device comprising a two-part oar, one part having a yoke, the other part a circular portion within the yoke, means for holding the circular portion within the yolk, but permitting it a free circular movement, the part carrying the circular portion having an opening in rear of said portion to permit the passage of the ends of the yoke, and a supporting frame.



Patent No. 546,921 is for an "Arrow-Head Shaped Vessel," awarded to Mark Golinsky, St. George, Bermuda. The points made will be readily seen from the engraving, special attention being called to the auxiliary propellers situated on the lateral offsets of the arrow head, at which point in the vessel is the maximum beam.



Another patent awarded was on a propeller wheel, recently granted to an Englishman, who has already secured protective rights on it in other countries. The claim is for a compound propeller comprising a divided hub, the outer propeller having front and rear connections with the sections of the divided hub, and the inner propeller rotating between said hub sections and front and rear connections. A compound propeller comprising the outer propeller having the blades with openings therein, leaving outer portions held by inner and outer arms to the driving shaft, and an inner propeller working in the openings in the blades of the outer propeller.



546,698. Dredging Bucket. Elijah J. Fader, Calgary, Canada. Filed Jan. 28, 1895. Serial No. 536,755. (No model.)

546,790. Apparatus for Reloading Coal. Frank H. Symons, Boston, Mass. Filed Dec. 10, 1894. Serial No. 531,318. (No model.)

A full description of these patents can be obtained by sending to the Patent Office, Washington, 14 cents for each, and mentioning THE MARINE RECORD.

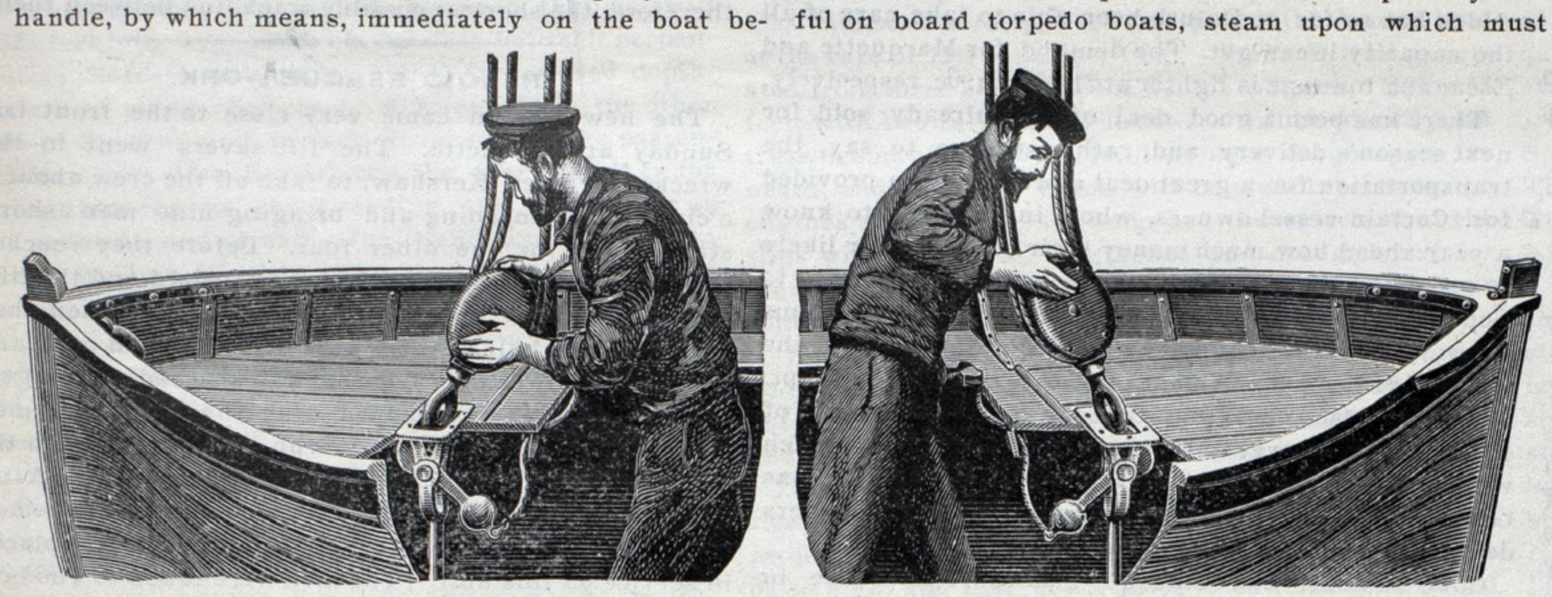
IT has been decided not to take the new battle-ship Indiana to be docked at Halifax after all. Her bottom will be cleaned as well as possible by divers and make her trial trip without docking about Obtober 14.

A new steel oil-tank steamer for the Pacific Coast Oil Co. is now well under way at the Union Iron Works, San Francisco. She will be 175 feet long, 28 feet beam, 18 feet deep and will cost $100,000. It is said that she will be one of the strongest steamers on the coast and will fill the highest requirements of Lloyds for the transportation of bulk oil. Her capacity is to be 6,000 barrels of oil.

AN INSTANTANEOUS BOAT GEAR.

(ILLUSTRATED.)

William Mills, of Bonners Field, Sunderland, England, has obtained a considerable reputation in the shipping world as the inventor and patentee of an instantaneous engaging and disengaging gear for ship's boats, of which we are enabled by the American Shipbuilder to give illustrations, and which for simplicity, reliability, and absolute safety, whether in disengaging or hooking on a boat, seems to leave nothing to be desired. To disengage a boat from the falls the gear is worked by the officer in charge maintaining a pull on a handle, by which means, immediately on the boat becoming waterborne, the fore-and-aft ends are simultaneously disengaged and the boat is freed. There is nothing "automatic" about the gear, hence it is impossible for one end of the boat to become detached before the other, so that neither end can be "hung up,"—a frequent source of accident, and unfortunately the cause of the loss of many lives. With this gear an absolutely clear boat is left, as there are no rods or lan-yards running down the center of the boat, nor are there any projections above the thwarts or seats. To hook it on, it is only necessary for a man forward and another aft to force the ring of the fall blocks into a guiding pocket, in which works a weighted lever, and when once hooked on it is impossible to become disengaged again without pulling the handle, as already stated; hence in the darkest night, and with the roughest sea running, hooking on is a matter of certainty and simplicity, and above all there is no delicate construction in the apparatus whatever, and only one lever, which makes it as simple as a common hook, thus avoiding the fault of the small balance lever sometimes used, which might be prevented from working by even a small chip or a little paint getting down the side.



MILLS' PATENT INSTANTANEOUS ENGAGING AND DISENGAGING GEAR.—Showing Method of Engaging.

The list of honors which Mr. Mills has obtained for this useful invention may be considered almost unique, for apart from the ordinary exhibition medals, such as the Liverpool, Newcastle, and the World's Fair, Chicago, etc., he has received two special distinctions; first, the special gold medal given to him by the Mercantile Marine Service Association, of Liverpool, when in competition with thirteen other boat gears; the second being the one hundred guineas prize awarded by the proprietor of Fairplay, London, for the boat gear which came out best at the great boat lowering competition held in connection with the naval exhibition, and in which practical tests were make in the River Thames from a steamer. The chief recommendation, however, which Mr. Mills has received for his gear lies in its general adoption throughout the Telegraph Cable Service especially in the repairing ships, which class of vessel, it is well known, have more actual boat work in open sea by night and day than any other service; every boat in the Eastern Telegraph Company and Eastern Extension Telegraph Company's fleets, besides others, being fitted with it. Without entering into too particular details, we may briefly say that it is adopted in almost every first-class company in the world, and in many foreign navies; Mr. Mills also holding testimonials to its efficiency from the Chinese navy, the Swedish navy, the Eastern Telegraph Company, the Chinese government Telegraph Service, the Netherlands India S. N. Company, the Liverpool and Hamburg Steamship Company, the American Line, and numerous other important steamship companies.

LIQUID FUEL FOR NAVAL VESSELS.

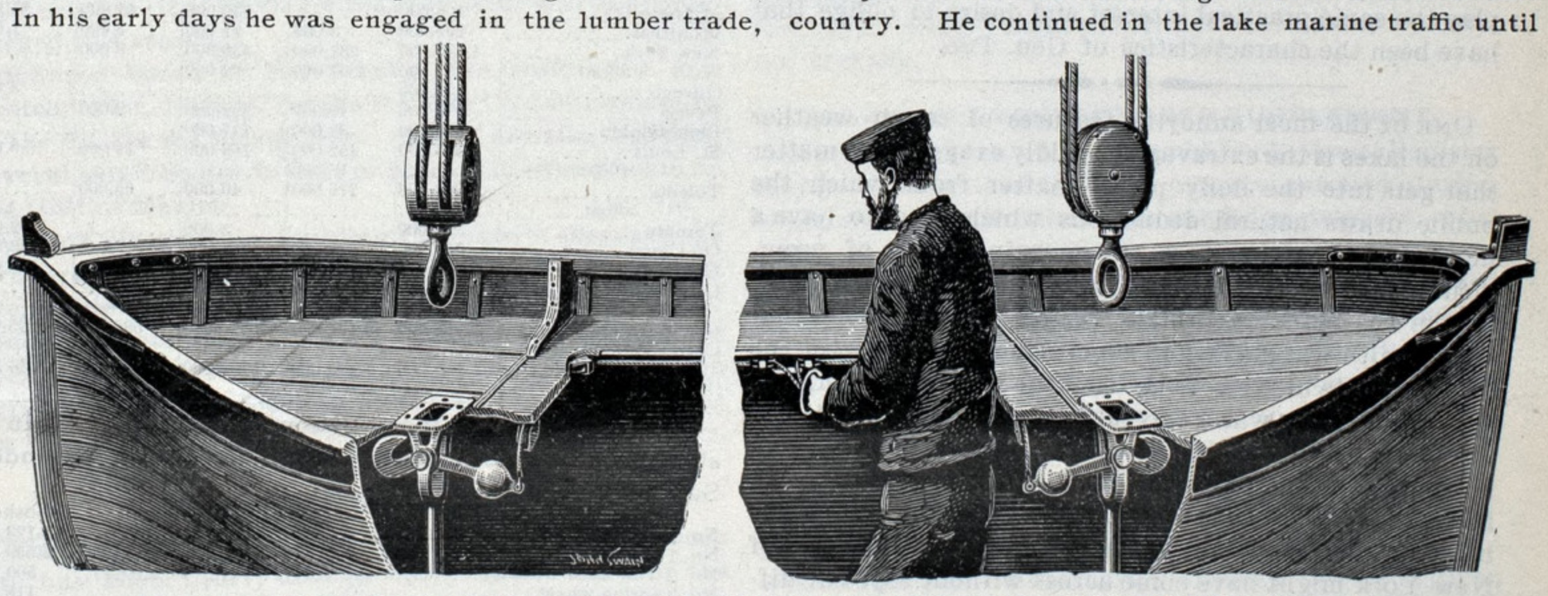
Experiments with liquid fuel will commence at Brooklyn Navy Yard, under the supervision of the Bureau of Steam Engineering, just as soon as a launch for this purpose can be secured. Coal is at present exclusively used as fuel in United States men-of-war. The main objection to coal is the length of time required to start the fires on men-of-war or in a torpedo boat. This objection would be done away with by the use of liquid fuel. The mere turning of a cock to permit the liquid to flow and the application of a lighted match are the only operations necessary in using the latter, and in an extremely short space of time steam is ready and the ship can proceed to sea. With coal, the time consumed amounts to hours. Liquid fuel would be especially useful on board torpedo boats, steam upon which must sometimes be gotten up in great haste in order to catch a fleeing enemy. A number of samples of liquid fuel have been submitted to the bureau for test, most of which have petroleum as their base. The great difficulty to be overcome in the use of this material is its storage. There is also considerable danger in the case of some of the oil products, of explosion, and the officers who will be selected to conduct the tests will be required to report especially upon the characteristics of the different materials tested.—Army and Navy Journal.

OBITUARY.

CAPT. JOHN SHAW.

THE RECORD regrets exceedingly the sad duty of recording the death of Capt. John Shaw, the well-known managing owner of the Eddy-Shaw fleet, which includes some of the largest and finest steamships on the Great Lakes. Capt. Shaw was fifty-eight years old. He was seized a fortnight ago with cholera morbus, and had since found himself unable to retain food on his stomach, so that he literally starved to death, in the midst of abundance.

Capt. John Shaw went to Bay City from Canada about 1870, but his life had been spent sailing on the lakes. In his early days he was engaged in the lumber trade, and he finally put all his earnings into the schooner Exile, which he sold in 1884. He interested the Eddy Bros. in the marine business, and they ordered the schooner John Shaw from Capt. James Davidson in 1885, and later placed contracts for the steamer John F. Eddy, C. A. Eddy and schooner Newell Eddy, and then the steamers Selwyn Eddy and Penobscot. A steamer now ordered from Wheeler & Co.'s yard, West Bay City, is for the same syndicate. Both schooners have been lost. The company also bought the steamer E. C. Pope shortly after she came out. Capt. Shaw was manager of the fleet, and was interested in the Selwyn Eddy, Penobscot and Pope. He leaves two daughters and two sons—John C. Shaw, the well-known admiralty attorney of Detroit, and Capt. Howard Shaw, master of the new steamship Penobscot.



MILLS' PATENT INSTANTANEOUS ENGAGING AND DISENGAGING GEAR.—Showing Method o Disengaging.

The executive and finance committee of the Lake Carriers Association, at its special meeting in Cleveland Tuesday adopted the following resolutions:

"We have learned with sorrow of the death of John Shaw, late of Bay City, an influential and valued member of this association. Capt. Shaw was a man of such natural ability that making his own way with untiring energy he built up great interests and managed them with skill, integrity and the success which good business habits and methods and careful attention always command. He was a good citizen, a good husband and father, a good friend in whose loss we mourn one whom we can ill spare; therefore be it

"Resolved, That we extend to the family of the deceased our sympathy in their great loss and that these resolutions be spread on the records of the sssociation and that the secretary be directed to furnish a copy to the family of Capt. Shaw."

CAPT. ROBERT ROBERTSON.

Capt. Robert Robertson, one of the oldest and best known masters on the Great Lakes, died recently at his home in the city of Seattle, Washington, where he has resided since 1890. A Seattle paper gives a lenghty account of Capt. Robertson's life, as well as some other information that will be interesting reading for his friends, who are numbered by the score all through the lake region. The article says:

Capt. Robertson was a remarkable man in many ways, and every one acquainted with him held his friendship in high esteem. He was born at Yell, on the northermost of the Shetland Islands, August 25, 1825, and at the age of 14 began his career as a sailor, in which calling, both before the mast and as officer, he visited every part of the known world, and his fund of information regarding foreign lands in his sea going days was seemingly inexhaustible. He was one of the pioneer miners both in Australia and South Africa, and a forty-niner in California. In 1857 he settled in Effingham county, Ill,, and embarked in the grocery business, but afterward removed to Chicago. There he married Mrs. Jessie Fleming.

Capt. Robertson's love for the spars and sails soon led him into traffic on the Great Lakes, and he become owner and master of several vessels. Among them will be recalled the schooners Lookout and Ostrich, each in her day the fastest sailing vessel on the lakes. He also owned and sailed the schooner J. A. Moss, and the brig Lowell, both of which vessels will be familiar to the memory of old time Chicago men. The captain was widely known both in Chicago and the whole lake country. He continued in the lake marine traffic until partially disabled, by paralysis in November, seven years ago. Early in 1890 Capt. Robertson came to Seattle. He was made a Mason in Cleveland Lodge, A. F. & A. M. in Chicago, and was ever a sincere and earnest member of that order. He was a man of general information, of strong convictions, and bold to maintan them, ever true to his friends, thoroughly honest, and a bitter enemy to anything savoring of dishonesty or treachery, either in social, religious or political affairs, He leaves a widow, a son, Daniel J. Robertson, of Chicago, a daughter, Mrs. E. Y. Jeffrey, of Seattle, a step-son, T. R. Fleming, and a niece, Mrs. Samuel J. Holmes.

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CLEVELAND, O., OCTOBER 3, 1895.

THE enforcement of the new customs regulation regarding boats trading between Canadian and American ports is proving excessively burdensome upon some of the smaller ferry lines, the cost of fees, etc., being in some cases in excess of the earnings. Surely the Treasury Department can find some means to mitigate this burden without affecting the work at Washington. It would seem that a daily statement of business by ferry lines would answer all purposes as well.

THE Toronto marine delegation's visit to Ottawa appears to have been productive of some prompt results. Telegraphic dispatches announce that Engineer Rubridge has been instructed to immediately dredge out the Iroquois lock in the Cornwall canal, and to lower the sill. While dredging can be secured rather promptly on this side, Dominion administration methods in such material questions as the alteration of canal locks seem considerably in advance of those of the United States.

THE commerce of the great lakes has lost a devoted friend in the death of Gen. O. M. Poe. While he had the interests of the Government fully at heart, and expended the money intrusted to him with the greatest wisdom and care, he was in hearty sympathy with all movements for the improvement of the lake waterways, and often gave the Lake Carriers sage advice as to what should be their policy in asking for aids to navigation. He was concervative, yet progressive, and all his actions were based on the most mature judgment. While the army has many capable engineers left, there are few who will display the same practical interest and desire to oblige that have been the characteristics of Gen. Poe.

ONE of the most annoying features of rough weather on the lakes is the extravagant, wildly exaggerated matter that gets into the daily press—matter from which the public draws natural deductions which tend to have a hurtful effect on business. A morning paper of prominence in Cleveland a few days ago quoted "an official" of the Cleveland & Buffalo Transit Co., as saying that Capt. Smith was staying in some Canadian port with the steamer State of New York until the weather moderated; that Capt. Smith was a careful man and *did't want to lose any lives!* To give this unique statement of Capt. Smith's recognized merits reflects ill upon other masters on the lakes. Now there was no sea on which hindered other boats from entering or leaving the port, and the State of New York might have come across without especial difficulty and entirely without the risk mentioned. It seems never to have occured to the guileless newspaper man that other considerations were at stake. The sea would have given the boat a disturbing motion, tending much to the discomfort of passengers, and toward mixing up of the various classes of freight on the main deck. To sort out and rearrange this freight even if not damaged would be no easy nor inexpensive task, and ninety out of a hundred passengers at this season of the year would prefer a day's delay to a spell of mal de mer. The demand of the New York Sun for absolute accuracy in statements has drawn so much attention to that paper from all over the country that the great wonder is other great dailies do not imitate it in this respect.

THE FREIGHT SITUATION.

The demand for boats constantly increases in activity, and grain shippers are rapidly forcing the ore rate up to a very profitable figure. The fall shipments of wheat from Duluth will prove very extensive, and 4½c. is now being freely paid for tonnage. This has attracted the vessels until the reluctant ore people have been paying $1.40 on ore from the head of the lakes, and one cargo has been placed at $1.50. The ore men will, of course, bring down no more than is positively necessary at such figures; but that amount is very large, and all the vessels cannot be permitted to go into the grain trade, which has so far at Duluth been able to take care of all the capacity it can get. The demand for Marquette and Escanaba tonnage is lighter at $1.05 and 90c. respecively.

There has been a good deal of ore already sold for next season's delivery, and, rather strange to say, the transportation for a great deal more has been provided for. Certain vessel owners, whose interest it is to know a year ahead how much money their boats will, or likely to earn, have been willing to take contracts running to September 1, and in some cases later, at what now seems the very moderate contract rate from the head of the lakes of $1 per ton. Among these is said to be Capt. James Davidson, who has taken a good-sized block of ore, and who has yet to build some of the vessels which will carry it. At least 400,000 tons, it is reported, has been provided for in this way already, but many owners do not feel disposed to tie up in this way.

Coal, lumber, and Chicago grain freights are in much the same condition as described a week ago. Lumber rates strengthen as the season advances.

On October 7th the lake lines will advance rates on all package freight from Lake Superior and Lake Michigan points, 2½c per 100 pounds. This will advance the through flour and and grain rate from St. Paul and Minneapolis to New York from 22½c to 25c per 100 pounds.

VISIBLE SUPPLY OF GRAIN.

As compiled for THE MARINE RECORD by George F. Stone, Secretary Chicago Board of Trade, September 28, 1895.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY. Bushels.
Albany	.....	30 000	55 000	.....	.....
Baltimore	514.000	71 000	64 000	60.000	.....
Boston	134 000	156 000	24 000	.....	.....
Buffalo	1,985,000	240,000	131,000	124 000	297,000
" afloat	.....	.....	.....	.....	.....
Chicago	14 601 000	1,881,000	503 000	136,000	115 000
" afloat	.....	.....	.....	.....	.....
Cincinnati	44,000	28 000	6,000	36 000	17,000
Detroit	391,000	37,000	20.000	4.000	.....
" afloat	.....	.....	.....	.....	.....
Duluth	5,293,000	.....	61 000	47 000	457,000
" afloat	.....	.....	.....	.....	.....
Indianapolis	117,000	56,000	.....	.....	.....
Kansas City	755,000	6 000	2,000	12.000	.....
Milwaukee	491,000	.....	.....	33 000	125,000
" afloat	.....	.....	.....	.....	.....
Minneapolis	7 406,000	.....	136.000	44 000	87,000
Montreal	234.000	3 000	91 000	3.000	1,000
New York	4,115.000	281 000	538,000	9 000	.....
" afloat	279 000	37 000	92 000	.....	.....
Oswego	50.000	.....	.....	.....	3.000
Peoria	79 000	42.000	202,000	2.000	.....
Philadelphia	333,000	88.000	117.000	.....	.....
St. Louis	1 323.000	452 000	168,000	11 000	9.000
" afloat	.....	16.000	.....	.....	.....
Toledo	943,000	216 000	40,000	65.000	.....
" afloat	.....	.....	.....	.....	.....
Toronto	11,000	.....	3.000	.....	2.000
On Canal	768.000	191.000	105 000	.....	229,000
On Lakes	902,000	1,557 000	337,000	.....	583 006
On Mississippi	.....	63,000	31,000	.....	.....
Grand Total	40,768.000	5 451,000	2 726.000	586.000	1,925,000
Corresponding date 1894	71 413,000	4 305,000	8 234.000	336,000	2 265.000

The following statement shows the stock of grain in store in public elevators at Duluth for the week ended Saturday, September 28:—

	Bushels.
No. 1 Hard wheat	1,123,465
No. 1 Northern wheat	2,559 674
No 2 Nor hern wheat	500,069
No 3 spring wheat	118,973
No grade spring wheat	16,946
Rejected and Condemned wheat	51,582
Special bin wheat	952,089
Aggregate	5 392,798
Wheat in store at Minneapolis	7,405,814

GNOMIC CHART OF THE SOUTH ATLANTIC.

The North Pacific Pilot Chart for October has just been issued. As announced in the North Atlantic Pilot Chart for August, the reverse side of the present issue, contains a Great Circle Sailing Chart of the South Atlantic Ocean, on the gnomic projection, designed by Mr. Gustave Herrie, of the division of chart construction, Hydrographic Office.

It is the intention of the Hydrographic Office to continue the publication of its series of Great Circle Sailing Charts, from time to time as opportunity offers. Their advantage to mariners is such that it is deemed advisable to give them a large circulation. It is believed that these charts well especially commend themselves to navigators, for the reason that the methods employed in using them are analagous to those of the Mercator charts. The gnomic projection is not for use as a general sailing chart, but as a simple means of finding the course and distance at any time in great circle sailing. A straight line down between any two points on this chart represents a portion of a great circle, and is, therefore, the shortest possible track line between them.

HEROIC RESCUE WORK.

The new woman came very close to the front last Sunday at Marquette. The life-savers went to the wrecked steamer Kershaw, to take off the crew about 5 o'clock in the morning and bringing nine men ashore, started back for the other four. Before they reached the wreck the second time the boat capsized and the life-savers had a hard task to save themselves. When they reached shore half of them were disabled from cold, and one was nearly dead. The boat was also badly damaged.

Among those who helped drag the exhausted men ashore was Mrs. Dr. Dawson, who sprang first into the surf and encouraged men to follow her example. After getting the men ashore she threw her fur wraps about one. Seven or eight overcoats were immediately placed in service on this hint. The men were taken to the hospital in carriages, and are doing well. A crew of volunteers manned another another life-boat and brought ashore the remaining four men on the Kershaw.

Captain John R. Glover, of the tug O. W. Cheney, of Maytham's Line Buffalo, is warmly commended for his heroism in rescuing the crew from the stranded schooner Nellie Mason, which was lying at anchor in an exposed position near Port Colborne, the seas washing completely over her. This rescue occurred on Sunday last. The Buffalo tugs succeeded on Monday in getting the Mason into port with a split rudder stock and ten inches of water in her hold.

PERSONAL.

Mr. George L. Russell, representing the Crosby Steam Gage Co., of Boston, is on a tour of the lake territory.

Misses Annabel and Mabel Wilson, daughters of Capt, Thomas Wilson, have just returned from a four-month's European tour.

Secretary H. D. MacKinnon, of the MacKinnon Manufacturing Co., called at THE RECORD office Tuesday on his return from a business trip to Pittsburg.

Peter L. Richards, of the Point aux Barques life-saving crew, has been appointed as assistant keeper of the Point aux Barques lighthouse, and Frederick Turk will fill the vacancy in the crew.

Captain James Lord, of New York, representing the Standard Automatic Releasing Hook Co., who have a device for lowering boats from all kinds of vessels, has been visiting Detroit, Cleveland and other lake ports.

Edward T. Peck was appointed last Friday to succeed the late superintendent John C. Parker at the upper yard of the Detroit Dry-dock Co. His successor as superintendent of the Springwells dry-dock has not yet been named.

LAUNCH OF THE BROOKLYN.

The cruiser Brooklyn was safely launched on Wednesday, October 2d. Quite a party from the Navy Department witnessed the launch. The principal dimensions are as follows: Length on the load water line, 400.50 feet; beam, extreme, 64.68 feet; draught, mean, normal, 24 feet; displacement, normal, 9,271 tons; displacement, trial, 8,150 tons; i. h. p., 16,000; speed in knots, per hour, 20; coal capacity, 1,753 tons; coal carried on normal displacement, 900 tons.

LAKE MICHIGAN HYDROGRAPHIC CHART.

The MARINE RECORD is in receipt of the first copies of the Hydrographic Office chart of Lake Michigan, which in completeness is fully in line with its predecessors. The scope of the chart includes the Straits, St. Mary's river, the greater part of the south shore of Lake Superior, all of Saginaw Bay, and all the west shore of Lake Huron north of Saginaw Bay. The usual information concerning the latest soundings, compass variations, etc., appears. The price of this chart is 75c.

SHIP BUILDING AND REPAIRS.

CONTRACTS FOR NEW BOATS.

There has been a good deal of newspaper talk published of late that has been based upon rumor. It has been announced in the dailies that the contract for the new Goodrich passenger boat would be awarded to-day, and they have given a series of apocryphal dimensions. As a matter of fact, no one has yet been asked to bid, as the plans and specifications, which are being carefully prepared in the office of President A. W. Goodrich, are not yet completed. It is settled, however, that she will be 225 feet long over all, with 207 feet between perpendiculars, 38 feet molded beam and 17 feet molded depth. She will in many respects be different from the other boats of the fleet, and, in fact, from other lake passenger steamers. THE RECORD has the best authority for stating that reports about trading the Menominee as part payment, and of using the Menominee's cabin on the new hull are all bosh. The boat will, of course, be of wood, as she is for summer and winter service, and so far as can at the present be judged from the outside, it is more than likely she will be built on Lake Michigan.

Capt. James Davidson, of West Bay City, has completed the preliminary work and is now sawing out the material for a double-deck schooner for which he will lay the keel next week. She will be 300 feet long by 44 feet beam and 20 feet depth of hold, and will have a capacity of 2,600 gross tons of ore on a draft of 14 feet 3 inches, which has been the prevaling depth at the Sault this season. She will have all the latest steam appliances, and will be a modern ship in every respect.

This schooner is the first of four large ships which Captain Davidson will build on his own account this winter. He will also build three or four other boats on contract, but is not ready to state yet just what they are. However, the Lake Michigan Car Ferry Transportation Co. has had such marked success with the two car ferry barges which Capt. Davidson built for them, that they have decided to ask for bids on two duplicates and a tug to tow them, for completion by next season. Capt. Davidson has undoubtedly the inside track on these.

The Detroit Drydock Co. closed a contract the latter part of last week with the Wolverine Steamship Co., of Detroit, the personnel of which includes Capt. E. M. Peck, Senator James McMillan, General Manager Alex. McVittie, of the Detroit Dry-dock Co.; Capt. M. W. Humphreys, F. J. Hecker, Charles D. Freer, and John B. Roby, son of Dr. George W. Roby.

The dimensions are 420 feet long over all, and 400 feet between perpendiculars, by 46 feet beam, and 28 feet depth. She will have triple-expansion engines, and two Scotch-type boilers, equipped with the Howden hot draft. She will somewhat resemble the steel steamer Harvey Brown in rig; she will not be a straightback, however, but will have plenty of sheer. Her cost is given as $275,000, and she will have the usual complete equipment of a modern freighter, including flexible, rectangular steel plates, just inside the hatches, which hang suspended, and are adjusted by pulleys at proper angles to trim cargoes of coal and ore. She will be out after the opening of navigation next year.

The Detroit Dry-dock Co., has also been awarded an order for a steel steamer for the lumber trade by C. R. Jones and others of Cleveland. The new boat is to be a single decker, 254 feet long over all and 240 keel by 42 feet beam and 14 feet depth, the size being limited to the Welland canal locks. She will have a triple-expansion engine 17, 27 and 46 by 36 inches and a single boiler, 12½ by 12. equipped with the Howden hot blast. She will have her bottom sheathed with four-inch oak, and is expected to carry 2,200 net tons. Her deck is of steel. She has water compartments forward and aft, and will be equipped with electric light, steam steerer, and steam capstans. She will be out June 15.

Nothing new is given out concerning the Detroit Drydock Co.'s Siberian contract, but a letter from Mr. Frank E. Kirby and recently published in Detroit papers was dated Moscow. From the letter it appears that Mr. Kirby and Mr. McMillan are seeing a good deal of Russia, and are having a good time, but all who are acquainted with them know they are not getting outside of the business atmosphere, and they are certain to bring home the formal contract in their pockets.

At a late meeting of the American Steel Barge Co.'s directors it was agreed that the project of building two ordinary type steel schooners should not be adopted for the present, but that the company should build on its own account this winter a whaleback steamship and barge. The former will be 380 feet long over all, by 45 feet beam and 26 feet molded depth. This is 20 feet longer, 3 feet wider, and 2 feet deeper than the Christopher Columbus, heretofore the giant of the fleet. The barge will be a little smaller, having 20 feet less length. The Carnegie Steel Company, Limited, and the Illinois Steel Company will furnish the plates and angles. The engines of the steamer will be built by the Samuel F. Hodge Co., of Detroit. They will be triple-expansion, 23, 37 and 63 by 42 inches stroke. They will develop 1,560 indicated horse-power, and propel the loaded boat at the rate of 12½ miles per hour. Steam will be generated from three boilers of the Scotch pattern, 11½ by 12 feet, with two furnaces. The boilers will be placed upon truss beams above the hold, leaving a cargo space beneath, and the cargo hatch will be placed between the engines and boilers. So long are the vessels that the slips will have to be lengthened and dredged out for them, and other special preparations made for their construction.

It is unlikely that the Colby will be cut in two and brought to the lakes as announced, not, at least before spring, as she would lose all her winter's trade, and the transfer could hardly be made this fall.

James McBrier, of Erie, who has been figuring on a steel tow barge, is said to have given up the building project till next year, when he thinks material will not be so high, and that better prices may then be obtained from shipbuilders.

The offer made by the Inman Towing Co., of Duluth. for the steel tug Frank W., of Alpena, was not good enough to buy her. and the deal, it is said, is off. The Frank W. has been in commission three years, and has had no accidents. While she has done good work, the business of her owners, Gilchrist & Fletcher, has outgrown her capacity, and they will probably sell her and build a larger tug with increased power.

At John Craig & Son's shipyard the car ferry Shenango No. 2 will be launched within ten days. The firm is still figuring on the steel hull that will take the place of the Dove on the Toledo-Monroe route. The new boat is to be 165 feet long with a capacity of 800 passengers, and will be equipped with the Dove's boilers. The big dry-dock is also nearly finished.

The hull of the Niagara Navigation Co.'s burned steamer Cibola has towed to Toronto. The Bertram Engine Works will take out and rebuild her machinery, and will construct a new hull to be 291 feet in length by 32 feet beam, 26 feet longer and 4 feet wider than the lost boat. New boilers will have be constructed, as the old ones were too badly scorched for a rebuild.

The new schooner which Langell & Sons propose building at their yard will tow behind the Oscar T. Flint next season. It is probable that the Flint will be double-decked this season.

Johnson Bros., of Ferrysburg, are building a new Scotch boiler, 10½x14, for the steamer City of Louisville, of the St. Joe & Chicago line. They are also building several small Scotch boilers to be used in oyster boats on the Gulf of Mexico.

At the Chicago Ship Building Company's shipyard the two large steel barges being built for the Minnesota Steamship Company have had their keels laid and keelsons and floors put in. Rapid progress will be made on them as some as the material for their construction arrives, as also for the new steel steamship to be built for Arthur Orr, M. M. Drake, C. W. Elphicke and others.

GENERAL REPAIR WORK.

The big 400-foot dock of the Ship Owners' Dry-Dock Co. has been nearly enough completed to allow of the dock being used. The initial boat was the steamer R. P. Ranney, which went in Monday to stop a leak. The next was the steamer Cadillac, which the Cleveland Ship Building Co. furnished with a new wheel Wednesday. The Cadillac left the dock this morning and goes to the Globe shipyard, where the damage above the water line, sustained by collision with the Matoa in the Sault, will be repaired. The C. W. Elphicke is in the other basin of the Ship Owners' dock. It was found necessary to calk her all over, inside and out, to furnish her with a new rudder stock, and to give her some new rail and stanchions.

The schooner Manitou had her bottom calked at the Cleveland dry-dock late last week, and the Ashtabula tug Sunol received a new wheel at the same time. The steambarge Thomas Gawn had her bottom and bilges calked this week. The Atwater, Magee, and Brightie all had their bottoms and butts thoroughly calked, and the steamer Rube Richards will go in next for similar treatment. Outside the dock, the company have been calking the top sides of the schooner Wyandotte, and she will go into the dock late this week to finish the calking and general overhauling which she is receiving.

The steamer William Chisholm, which had her after house practically demolished by collision with the upper Seneca street bridge last Friday evening, is at the yard of the Cleveland Ship Building Co., who are doing a quick job on her, and expect to have her out Saturday evening.

CHICAGO.—At Miller Bros.' shipyard the steamer John Spry was in dock for calking and repairs to her wheel. The steamer Progress had a loose wheel tightened. The schooner Olga was recalked, and the schooner John Alec had a leak stopped.

DETROIT.—The barge City of the Straits has been getting a complete overhauling at Clark's dry-dock. The steamer Douglas went on the ways at Oades' shipyard late last week for minor repairs and recalking, and the steamer Pilgrim was pulled out this week to have her stearn-bearing fixed up. The Riverside Iron Works have shipped a new wheel to Mackinaw City for the little steamer Islander.

BUFFALO.—The steamer Northern Wave, while passing throngh the Tiffr Farm bridge last Thursday night in tow of a harbor tug, struck one of the stone abutments, breaking some plates and frames. A survey placed her damages at $1,980,41, and repairs are being made. The surveyors on the schooner Charles Wall could not agree as to the extent of her damages, so they resigned and others have been appointed. The tug Kelderhouse got her rudder and shoe reraired in the Union dry-dock.

MILWAUKEE.—The steamers Marion and Topeka struck the water main leading to the south side, breakit open, and ensuing considerable damages. The Topeka had to go into dock for repairs to her shoe in consequence. The steamer Cumberland discovered a leak last Saturday night, and had to go into dock to have it stopped.

A LAUNCH AT WHEELER'S YARD.

The steel lumber steamer Simon J. Murphy, named for the well-known Detroit lumber man, was launched last Thursday morning at Wheeler & Co.'s yard, West Bay City. She is 254 feet over all by 38 feet beam by 15 feet depth of hold. She is owned by the Murphy Lumber Co., of Green Bay, and is expected to break the lumber-carrying record. Her bottom is sheathed. The steamer Katahdin, a duplicate of the Murphy, save the sheathing, will be launched from Wheeler's yard in a few days. Capt. Thomas Dunn, of Milwaukee, will sail the Murphy.

INLAND LLOYDS' OCTOBER SUPPLEMENT.

Supplement No. 6, of the Inland Lloyds Vessel Register contains the names of three vessels enrolled during September—the two Shenango car ferry steamers, rated A1* and valued at $150,000 each, and the schooner Aurania, measuring 2,999 tons net, rating A1, and valued at $130,000. The steambarge City of Concord, which was burned two years ago at Toledo, and which has been getting a thorough rebuild at Port Huron, has been given a valuation of $13,000, and a rating of A2½. The schooner C A. King, which was given a rebuild and which recently changed hands, was given a $1,200 valuation and a rating of B1½. This has little effect, however, as she was lost in Lake Huron in the late storm, and was uninsured. The schooner Thomas Dobbie is given an A2 rating and a $5,000 valuation, and the R. G. Morey is entered as valued at $1,500 and rating B1 for coarse freight only. The barge Agnes L. Potter rates B1, $1,800, and the Wayne has had her rating raised from A2½ to A2.

THE BANNER GRAIN CARGO.

The steamship Yale, the last boat turned out by the Cleveland Ship Building Co., eclipsed all steamship records by leaving Chicago with 117,508 bushels of corn and 66,000 bushels of oats, at a mean draft of 15 feet 5 inches. This is equal to 4,346 net tons. The Centurion held the previous record out of Chicago with 152,000 bushels, or 4,255 tons.

NOTICE TO MARINERS.

HAY LAKE CHANNEL, ST. MARY'S RIVER.

Notice is hereby given that, on or about October 5, 1895, lights, as follows, will be established to mark Hay Lake Channel, St. Mary's River:

Middle Neebish Cut Lights.

NORTH SIDE.—Lower No. 2, Middle No. 4, Upper No. 6. Each a fixed red lantern light, 20 feet high, suspended above the northerly edge of the cut from the outer end of the boom, of a red derrick-like structure erected, respectively, on the lower end, middle and upper end of the stone dike running parallel with the cut. Light No. 4 is about 2,600 feet, and Light No. 6 about 5,500 feet N. 69° W. (NNW. ⅛ W.) from No. 2.

SOUTH SIDE.—Lower No. 1, Middle No. 3, Upper No 5. Each a fixed white lantern light, 12 feet high, suspended from an arm on a white post standing in the center of a black raft-like float moored close to the southerly edge of the cut, respectively, opposite lights No. 2, 4 and 6.

RANGE LIGHTS.—Front No. 7. A fixed white lens-lantern light, 23 feet high, illuminating 90° of the horizon, on the westerly prolongation of the axis of the cut, suspended centrally in front of a white day mark of vertical slats on the outer end of the boom of a brown derrick-like structure erected on a square, red, pyramidal crib in 18 feet of water. Rear No. 9. A fixed white lens-lantern light, 34 feet high, illuminating 90° of the horizon, on the westerly prolongation of the axis of the cut, in 14 feet of water, and 2,500 feet N. 69° W. (WNW. ⅛ W.) in rear of light No. 7. The structure from which this light is shown is, in every particular, excepting height, like that from which No. 7 is shown. The center of the crib of Light No. 7 and Light No. 9 is about 25 feet to the southward of the axis of the cut.

JUNCTION LIGHT No. 8.—A fixed red lantern light, 12 feet high, on a red float, in every particular excepting color like the floats from which lights Nos 1, 3 and 5 are shown, moored close to the NE. side of the channel at the turning point and in the angle formed by Middle Neebish and Lower Hay Lake cuts.

Lower Hay Lake Cut Lights.

RANGE LIGHTS—Front No. 10. A fixed white lens-lantern light, 52 feet high, illuminating 90° of the horison, on a white triangular, pyramidal skeleton, iron tower, with the white day mark of horizontal slats, erected near the shore on the N. end of Neebish Island and on the southerly prolongation of the axis of the cut. Rear No. 11. A fixed white lens-lantern light, 70 feet high, illuminating 90° of the horizon, on the N. end of Neebish Island and the southerly prolongation of the axis of the cut, 2,500 feet S. 30° E. (SSE. ⅝ E.) in rear of Light No. 10. The structure from which this light is shown is, in every particular, excepting height, like that from which Light No. 10 is shown.

EAST SIDE MIDDLE LIGHT No. 12.—A fixed red lantern light, 12 feet high, suspended from an arm on a red post on a red crib on the E. side of the cut, about midway of its length, and about 1⅛ miles above Junction Light No. 8.

WEST SIDE MIDDLE LIGHT No. 13—A fixed white lantern light, 12 feet high, on a black float moored close to the westerly side of the cut, opposite Light No 12.

EAST SIDE NORTH ENTRANCE LIGHT No. 14.—A fixed red lantern light, 12 feet high, on a red float moored close to the easterly side of the cut at its N. end and about 2¾ miles above Junction Light No. 8.

WEST SIDE NORTH ENTRANCE LIGHT No. 15.—A fixed white lantern light, 12 feet high, on a black float moored close to the westerly side of the cut at its N. end, and opposite light No. 14. The floats from which lights No. 13, 14 and 15 are shown, are in every particular (excepting color in the case of Light No. 14) like those from which lights Nos. 1, 3 and 5 are shown.

NINE-MILE POINT LIGHT No. 16.—A fixed red lens-lantern light, 20 feet high, illuminating 270° of the horizon, and visible to vessels from all points of approach, on a white post attached to a small red house on a square red pyramidal crib in 12 feet of water off Nine-Mile Point, and just to the eastward of the turning Point from the Lower Hay Lake Cut Range line to the Middle Hay Lake Range line.

Middle Hay Lake Channel Lights.

RANGE LIGHTS.—Front No. 17. A fixed white lens-lantern light, 30 feet high, illuminating 90° of the horizon, on a white post with white day mark, on a square red pyramidal crib in 20 feet of water, about ½ mile N. by E ½ E. of Six-Mile Point, and to the eastward of the southerly end of the Upper Hay Lake Cut. Rear No. 18. A fixed white lens-lantern light, 80 feet high, illuminating 90° of the horizon, on a white, triangular, pyramidal, skeleton, iron tower, with white day mark of horizontal slats, on a square, red crib in 8½ feet of water, 4,000 feet N. 21° W. (N. by W. ⅛ W.) in rear of Light No. 17.

Upper Hay Lake Cut Lights.

FRECHETTE POINT RANGE LIGHTS.—Front No 21. A fixed white lens-lantern light, 54 feet high, illuminating 180° of the horizon, on a white, triangular, pyramidal skeleton, iron tower, with white day mark of horizontal slats, on a platform on piles in 3 feet of water, about 3-16 miles below Frechette Point and on the northerly prolongation of the axis of the Upper Hay Lake Cut. Rear No. 22. A fixed white lens lantern light, 80 feet high, illuminating 180° of the horizon, in 4 feet of water, nearly ⅜ miles above Frechette Point and on the northerly prolongation of the axis of the cut, and 2,800 feet N. 37° W. (NW. ¾ N.) in rear of Light No. 21. The structure from which this light is shown is in every particular, excepting height, like that from which Light No. 21 is shown.

Little Rapids Cut Lights.

SIX-MILE POINT RANGE LIGHTS.—Front No. 19. A fixed white lens-lantern light, 54 feet high, illuminating 90° of the horizon, on a white, triangular, pyramidal skeleton, iron tower, with white day mark of horizontal slats, on a platform on piles in 3 feet of water, about 1⅛ miles above Six-Mile Point, and on the southerly prolongation of the axis of the Little Rapids Cut. Rear No. 30. A fixed white lens-lantern light, 82 feet high, illuminating 90° of the horizon, on Six-Mile Point and the southerly prolongation of the axis of the cut, 6,000 feet S. 29° E. (SSE. ⅝ E.) in rear of Light No. 19. The structure from which this light is shown is in every particular, excepting height, and that it stands on land (instead of a platform on piles) like that from which Light No. 19 is shown.

WEST SIDE LOWER LIGHT No. 23.—A fixed white lantern light, 18 feet high, on a white post with white oil house, on the SE side of Island No. 1, and the W. side of the lower end of the cut through the island.

EAST SIDE LOWER LIGHT No. 24.—A fixed red lantern light 18 feet high, on a white post with red oil house, on the SE. side of Island No. 1 and the E. side of the lower end of the cut through the island.

EAST SIDE UPPER LIGHT No. 26.—A fixed red lantern light, 18 feet high, on a white post with red oil house, on the N. end of Island No. 1, and the E. side of the cut through the island.

WEST SIDE UPPER LIGHT No. 25.—A fixed white lantern light, 18 feet high, on a white post with white oil house, on the N end of the island B, off Mission Point, and on the W. side of the cut.

NORTH ENTRANCE LIGHT No. 27.—A white light of the fifth order, occulting every 5 seconds, 36¾ feet high, illuminating the entire horizon, in a black lantern, on a square buff dwelling, with white trimmings and red pyramidal roof, on a square red crib in 20 feet of water, close to the W. side of the cut at its northern entrance.

Heights of lights are referred to mean lake level; distances in miles are statute miles.

By Order of the Light-House Board:

JOHN G. WALKER,
Rear-Admiral, U S. Navy, Chairman.

WASHINGTON, Sept. 30, 1895.

PINE TREE HARBOR RANGE LIGHTS.

Two range lights were in July last put in operation, by private enterprise, at Pine Tree Harbor, on the west coast of North Bruce, Lake Huron, between Chantry and Lyal Island lights, and will be regularly maintained. The lights are fixed white, shown from small headlight lanterns hoisted on poles. The illuminating apparatus is catoptric. No further details respecting these lights, or directions for using them, have been received. The entrance to the harbor is thought to be intricate, so that vessels would require local knowledge to make use of the lights. Further details respecting these lights will be published when received.

WILLIAM SMITH,
Deputy Minister of Marine and Fisheries.

Department of Marine and Fisheries, Ottawa, 23d September, 1895.

THE OCTOBER ARENA.

The Arena for October is unusually attractive. A fine portrait of the talented young Tennessee authoress, Will Allen Dromgoole, forms the frontispiece, and a richly illustrated paper on "Chester on the Dee" from the pen of the editor, opens this issue. A contribution which will doubtless excite general attention and occasion much comment is from the pen of Hon. A. R. Barrett, ex-government examiner for failed banks, entitled "The Era of Fraud." Helen H. Gardener continues her able history of the legislative battle waged during last winter for the protection of innocent girls against libertines. Rev. Walter Evans, D. D., a Congregational clergyman, discusses the "Influence of Plutocracy upon the Church" in a vigorous manner. Robert Grieve writes a thoughtful paper on "Why the Workers Want.' A symposium by representative women on vital social problems contains excellent papers by Julia A. Kellogg, on "Land and Money;" Charlotte Perkins Stetson on "The Solution of the Labor Question," and Alice Thatcher Post on "The Great Neighbor." "The England of Sir Thomas More," by the editor of the Arena, is one of the strongest papers in his series on the Renaissance. Ex-Governor James M. Ashley writes very suggestively on "Should the Supreme Court be Re-organized?" Hon. John Davis continues his striking paper on "Napoleon Bonaparte." William C. Cooper, M. D., a venerable physician and essayist, contributes a rather remarkable article on "Occult Manifestations." Probably the contribution which will provoke the most thought and discussion, is entitled "The Vaccination Error." It is written by Alfred Milne, M. A., a prominent English essayist, and is one of the strongest arguments against vaccination that has appeared. Eugene Victor Debs writes on "The Significance of Labor Day." "Manual Labor for Women and the Problem of Domestic Service," is ably discussed by G. Vrooman.

THE OCTOBER CENTURY.

With the October number The Century closes its twenty-fifth year and its fiftieth volume. This month marks the centenary of Keats, and there are several articles on the poet. Kenyon West writes of "Keats in Hampstead," tracing with care the haunts of the poet in that place and recording the reminiscences of an aged Englishman, who as a boy, knew Keats and idolized him. Henry Van Dyke furnishes a study of "The Influence of Keats" on English and American poetry. There are also several tributes to E. J. Glave, the young explorer who died a few months ago in Africa, where he was conducting an investigation of the slave trade in the interests of this magazine. Professor Cesare Lombroso has an essay on "Nordau's 'Degeneration'; Its Value and Its Errors," in which he takes exception to many of the conclusions of his followers. There is a second paper by Miss Anna L. Bicknell on "Life in the Tuileries Under the Second Empire," full of lively anecdotes of Eugenie and the ladies of her court. Professor Sloane's "Life of Napoleon" reaches the period of the execution of the Duc d'Enghien. There is a study of "The Marriage Rate of College Women," by Miss Milicent W. Shinn. Mrs. Anna Bowman Dodd writes of "A Cruise on the Norfolk Broads," a delightful yachting experience in England, for which Joseph Pennell has drawn a number of illustrations. Besides the concluding chapters of Marion Crawford's dramatic novel, "Casa Braccio," the fiction of the number is contributed by George A. Hibbard, Ruth McEnery Stuart, and George Wharton Edwards.

TRADE NOTES.

The Erie Boiler works, Buffalo, N. Y., no doubt build as many boilers for the sea coast as any other firm in the United States, if not more. They have a great and most modern plant and their reputation for good work is unsurpassed.—Marine Journal, New York.

The Joseph E. Dixon Crucible Co. have issued a neat pamphlet especially devoted to testimonials from railroad men in reference to the practical use of Dixon's Pure Flake Graphite.

The MacKinnon Manufacturing Co., of Bay City, Mich., have received a letter from the officer of the steamer Ossifrage, to whom the MacKinnon Co. furnished one of their propeller wheels recently. The letter expresses gratification with the wheel, and states that most of the prominent wheel makers have had their makes on this boat at one time or another, but that the present wheel has given the Ossifrage an increased speed, with fewer turns A wheel was furnished recently to the tug Giant.

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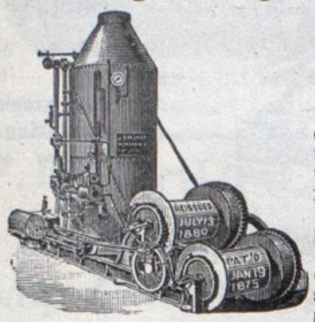

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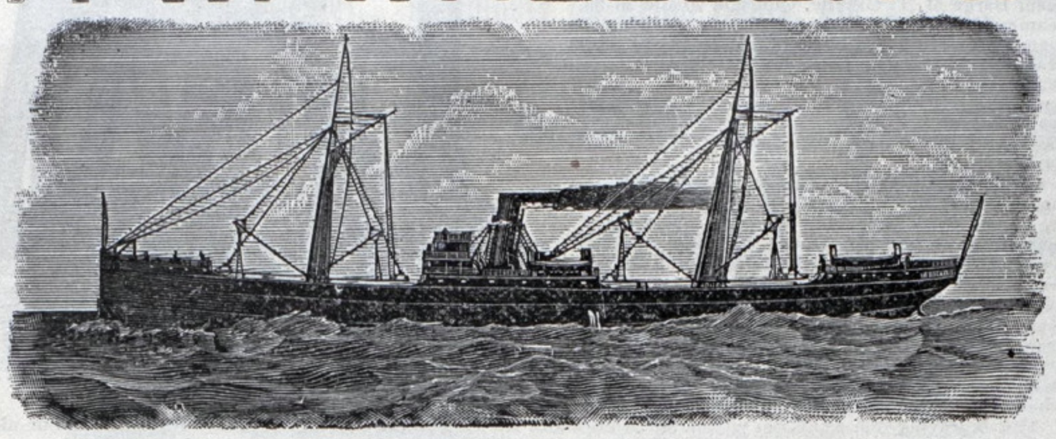

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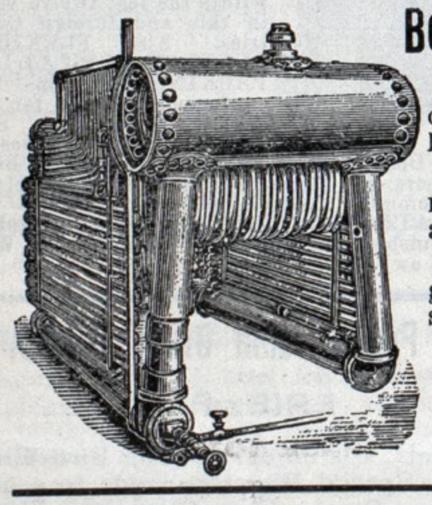

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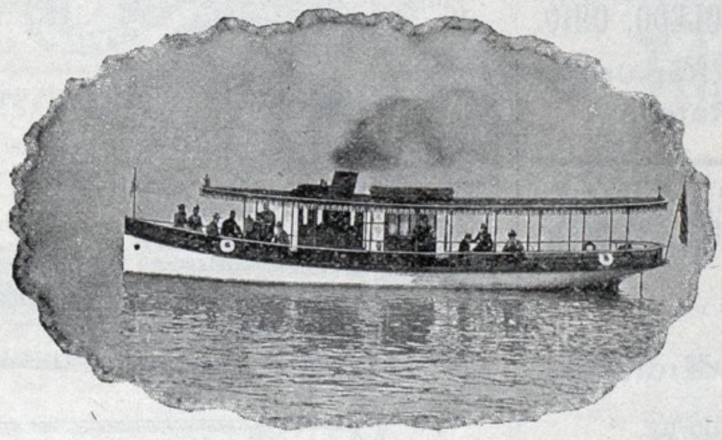

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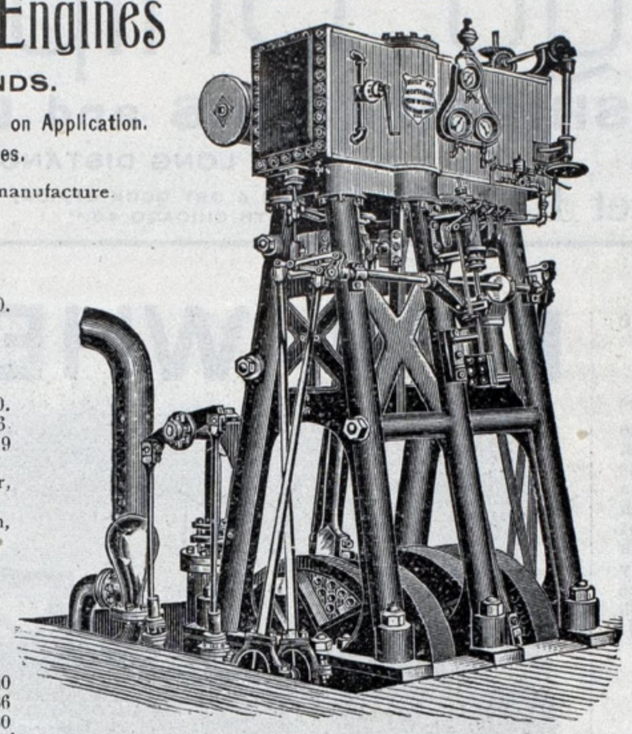

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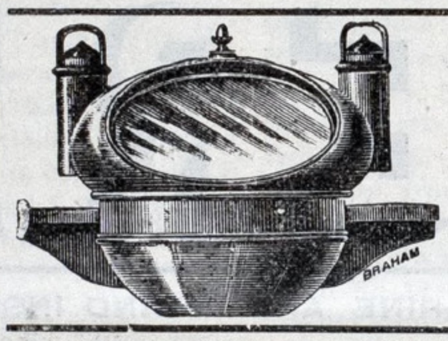

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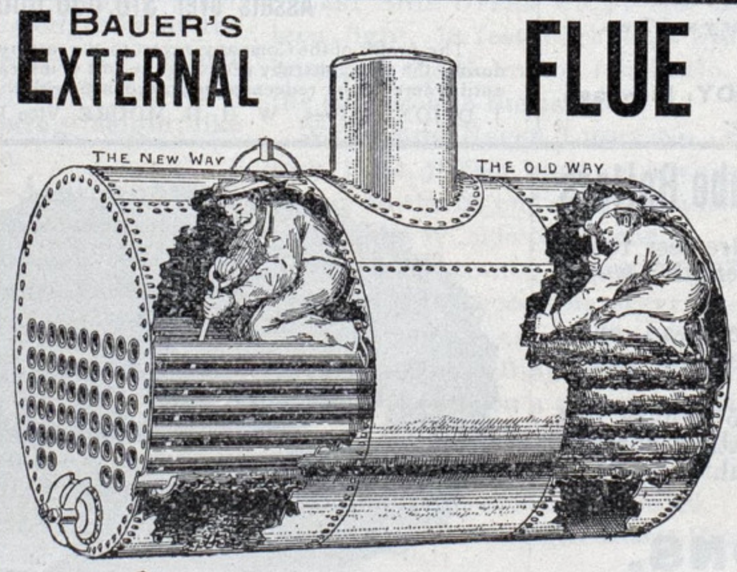

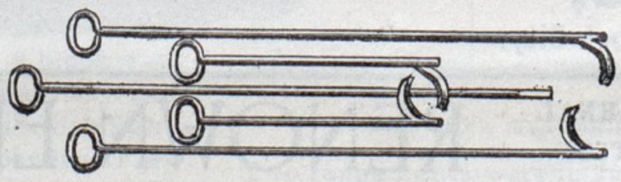

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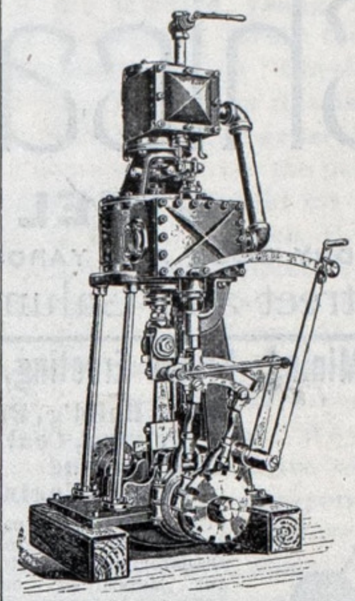

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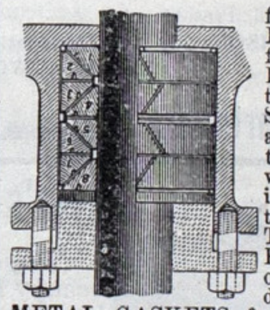

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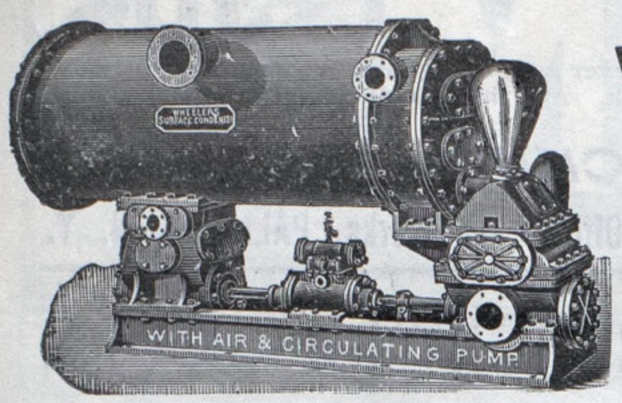

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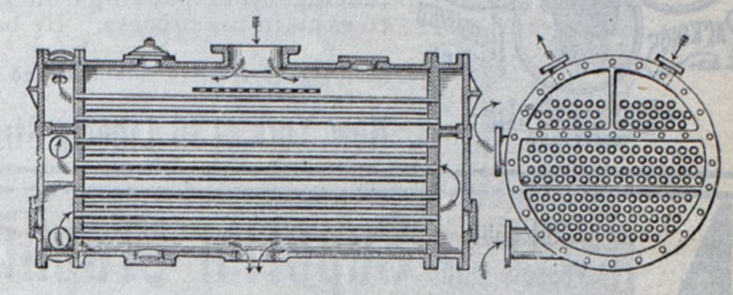

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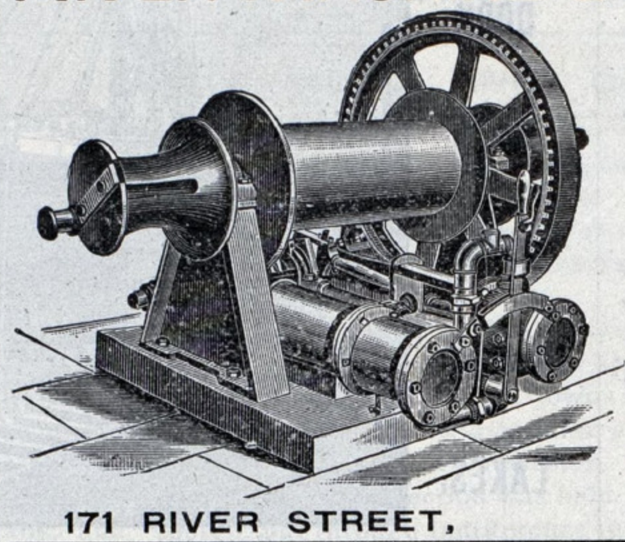

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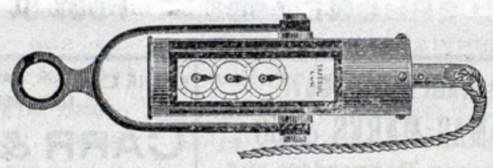

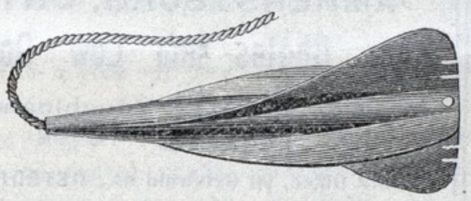

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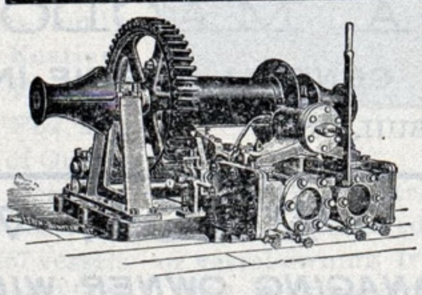

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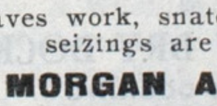

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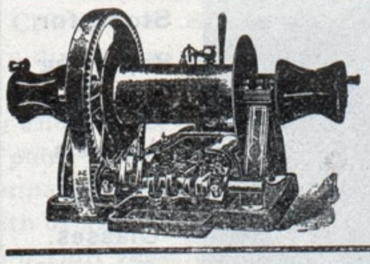

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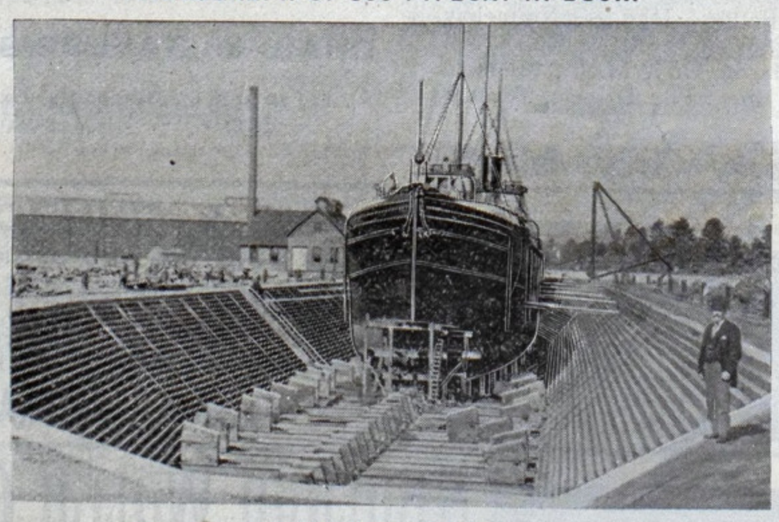

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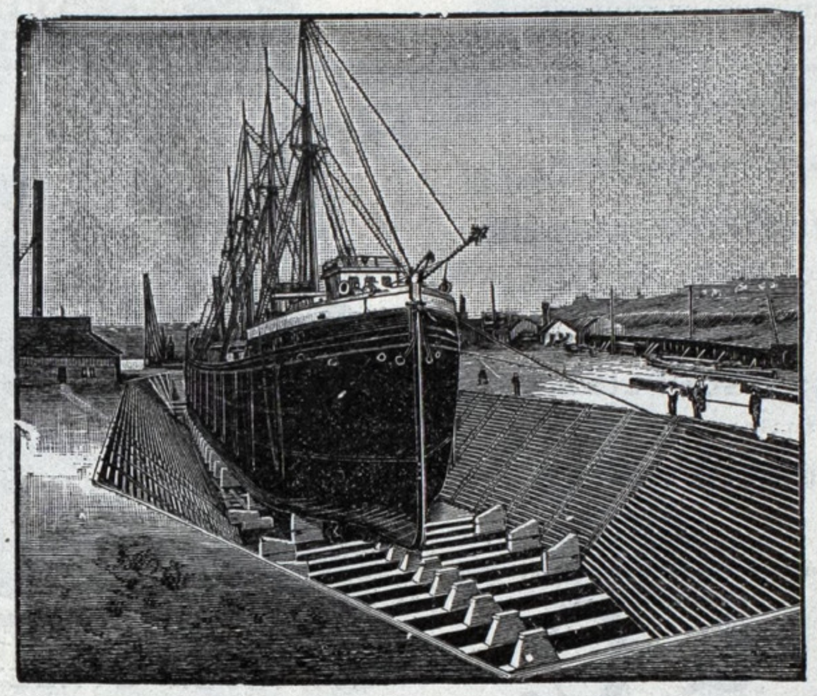

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